



Amendments to the Specification

Please cancel the paragraph at page 1, lines 3-6.

INCORPORATION BY REFERENCE

~~—The disclosure of Japanese Patent Application No. 2000-323656 filed on October 24, 2000 including the specification, drawings and abstract is incorporated herein by reference in its entirety.~~

Please replace the paragraph beginning on page 8, line 3, with the following rewritten paragraph:

Fig. 2 shows the construction of the fuel cell system 60. The fuel cell system 60 includes a fuel tank 110 for storing a raw fuel such as gasoline, a water tank 120 for storing water, and a reformer 130 for producing a fuel gas (or a reformat gas) by reforming the raw fuel, and a fuel cell 140. The reformer 130 includes a vaporizing unit 132 for vaporizing or gasifying the raw fuel, a catalytic heating unit 134 for supplying heat to the vaporizing unit 132, an electric heating unit (EH) 135, and a reforming unit 136 that houses a reforming catalyst. The reformer 130 further includes a heat exchange unit 137 for cooling the reformat gas, a shift reaction unit 138 for reducing a content of carbon monoxide in the reformat gas by utilizing a shift reaction, and a partial-oxidation unit 139 for reducing a content of carbon monoxide in the reformat gas by utilizing a partial-oxidation reaction.

Please replace the paragraph beginning on page 17, line 5, with the following rewritten paragraph:

In step T4, the control unit 70 causes the fuel cell system 60 to operate in the carbon removal mode by executing the carbon removal process once or a plurality of times (Nth time(s)). Step T5 is then executed to calculate an amount of carbon removed during the carbon removal mode operation. The thus obtained amount of removed carbon is subtracted from the integrated amount of deposited carbon ΣC_{dep} . The amount of carbon removed by

the carbon removal mode operation of the fuel cell system 60 may be calculated in accordance with the length of the carbon removal period Δt , the number of execution N of the carbon removal process, and the O/C ~~ratio~~ratio. This permits a proper evaluation of the integrated amount of deposited carbon ΣC_{dep} after the carbon removal mode operation. Upon termination of the carbon removal mode operation of the fuel cell system 60, the control unit 70 returns to step S1 of the flowchart of Fig. 6 to execute steps S1-S4 repeatedly.

Please replace the paragraph beginning on page 22, line 13, with the following rewritten paragraph:

Fig. 14A-14C are graphical illustrations explaining a manner of operating the fuel cell system 60 in the carbon removal mode when the vehicle is in the startup condition. At time t_{10} , the ignition key of the vehicle is placed in the ON position, and the operation of the fuel cell system 60 is started. During a period between time t_{10} and time t_{11} , only the catalyst heating unit 134 (Fig. 2) is operated so that its temperature is elevated. At time ~~44~~ t_{11} at which the temperature of the catalyst heating unit 134 is raised to a certain high level, the water and the raw fuel start being supplied to the vaporizing unit 132, and the air ARO start being supplied from the air supply device 166. Subsequently, the carbon removal process is executed during each carbon removal period Δt that starts from time t_{12} and time t_{13} .